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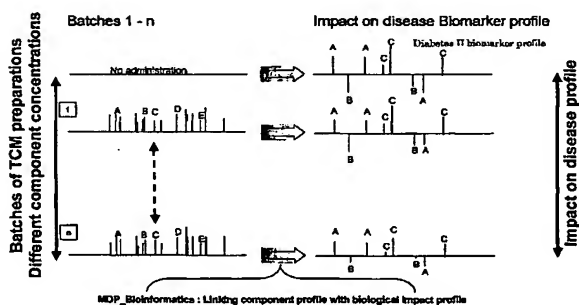
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(54) Title: **METHOD FOR DETERMINING THE IMPACT OF A MULTICOMPONENT NATURAL PRODUCT MIXTURE ON THE BIOLOGICAL PROFILE OF A DISEASE WITHIN A GROUP OF LIVING SYSTEMS AND THE DEVELOPMENT AND QUALITY CONTROL OF NATURAL PRODUCT BASED MEDICINE**

**Multidimensional Pharmacology :
Bioactivity profiling discovery**



(57) Abstract: The present invention provides a method for determining the impact of a multicomponent natural product mixture on the biological profile of a disease comprising the steps of: (a) determining a biological profile of the disease by comparing the biological profile of a group of living systems with symptoms of the disease with the biological profile of a reference (or healthy) group of living systems, using a multivariate analysis; (b) determining the impact of a series of samples of the multicomponent mixture on the biological profile of the disease, in which samples the concentrations of one or more natural components or groups of natural components differ, using a multivariate analysis; (c) determining the composition of

the samples of the multicomponent mixture that have shown in step (b) a desired impact on the biological profile of the disease, using a multivariate analysis; (d) identifying within the compositions as determined in step (c) the effective components or groups of components and their respective concentrations required for having the desired impact on the biological profile of the disease, using a multivariate analysis. The invention also provides a method for preparing a medicament, wherein the effective natural components or groups of components as identified in step (d) are combined in the respective concentrations required for having an impact on the biological profile of the disease. The invention further provides a method for designing and controlling the composition of a multicomponent mixture, wherein the concentration of at least one natural component of the mixture is adjusted to ensure that the at least one natural component of the mixture has an impact on a biological profile of the disease. The present invention also relates to the use of the present method as a tool for optimizing the breeding, cultivation or post harvesting processing of natural products for use in natural product-based medicines.

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